



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/614,050

07/08/2003

Kang Soo Seo

1740-000010/US

7555

30593

7590

10/14/2008

HARNESS, DICKEY & PIERCE, P.L.C.

P.O. BOX 8910

RESTON, VA 20195

EXAMINER

ZHAO, DAQUAN

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

10/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/614,050	Applicant(s) SEO ET AL.	
	Examiner DAQUAN ZHAO	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/17/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 8-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 8-10 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For claims 8 and 10, there's no support in the specification for the term "computer-readable medium".

Claim 9 incorporates the deficiency as set forth above.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-10 are rejected under 35 U.S.C. 101 because claims are directed to non-statutory subject matter.

For claims 8 and 10, the examiner treats "computer-readable medium" as a signal since the specification does not describe what the "computer-readable medium" is.

Also for claims 8 and 10, the examiner agrees the "data structure" in claims 8 and 10 a functional descriptive material since the navigation data and the video data have both physical and logical relationship, designed to reproduction of the video data. However, the claim language does not permit the functionality of the "data structure" to be realized because the functionality of the "data structure" does not necessarily have to be used in the claim. As explained in MPEP 2106.01, "...when functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and **will be statutory in most cases since**

USE of technology permits the function of the descriptive material to be

realized..." Claim 1 of In re Lowry recited "...a data structure...**used by** said application program...".

Claims 8 and 10 of the instant application are distinct from claim 1 of In re Lowry because the data structure of In re Lowry has to be used by the application program and the "data structure" of the instant application does not have to be used in any computer or system to permit the function of the "data structure" of the instant application to be realized.

Claim 10 incorporate the deficiency as set forth in claim 1 above.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al (US 6,181,870), hereinafter referenced as Okada.

For claim 10, Okada teach a computer-readable medium having a data structure for managing video data recorded on the computer-readable medium (e.g. figure 6A shows the data structure of video stream recorded on the DVD, column 16, lines 22-60), comprising:

- A data area storing a plurality of data packets including source packets of at least video data of a stream including a plurality of clip files recorded on the recording medium (e.g. figure 6A, a video stream

Art Unit: 2621

contains plurality of GOP, wherein each GOP contains plurality of video packets, column 16, lines 44-60);

- a plurality of program reference timing control areas recording in said plurality of data packets (e.g. figure 26 and figure 6 shows plurality of SCR, system clock reference are place in the header of the video packets, the video packets correspond to the “program reference timing control areas”);
- a plurality of time control information areas, representing decoding time interval information (e.g. figure 26 and column 22, lines 35-49, the decoding time interval is from the First_DTS to the Last_DTS, and the First_DTS and the Last_DTS correspond to plurality of time control information, the video packets corresponds to the “time control information areas”);
- a management area storing management information for managing reproduction of the stream, the management information including an information file associated with each clip file providing a map for the associated clip file, each map mapping presentation time information to address information for the associated clip file (e.g. column 80, lines 51-67 and figure 12A, time map table).
- Wherein each of the said plurality of time control information area is recorded in an arbitrary one packet having one of said program reference control areas (e.g. the DTS is place in arbitrary video

packets because figure 23A shows that the DTS is not place in every video packet. The DTS has to be able to be placed in arbitrary video packet to define the decoding period of the video. e.g. figure 26 and column 22, lines 35-49).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US 6,181,870 B1), as applied to claim 10 above, and further in view of Seo et al (US 2002/0,006,273 A1), hereinafter referenced as Seo.

For claim 8, Okada teaches teach a computer-readable medium having a data structure for managing video data recorded on the computer-readable medium (e.g. figure 6A shows the data structure of video stream recorded on the DVD, column 16, lines 22-60), comprising:

- a data area storing a plurality of data packets including source packets of at least video data of a stream including a plurality of clip files recorded on the recording medium (e.g. figure 6A, a video stream contains plurality of GOP, wherein each GOP contains plurality of video packets, column 16, lines 44-60);

Art Unit: 2621

- a plurality of time control information areas (e.g. Figure 6H, plurality of GOP contain plurality of video packets, where a PTS and a DTS can be assigned once to each GOP, column 23, lines 26-49), representing decoding time interval information (e.g. interval corresponds to the GOP), each of said plurality of time control information areas recorded at a fixed time interval in a corresponding one of said plurality of data packets of the stream (e.g. figure 6H, PTS and DTS in one packet header).
- a management area storing management information for managing reproduction of the stream, the management information including an information file associated with each clip file providing a map for the associated clip file, each map mapping presentation time information to address information for the associated clip file (e.g. column 80, lines 51-67 and figure 12A, time map table).
- wherein the said fixed packet interval corresponds to at least two transport stream packets or source packets (the interval of a GOP must corresponds to at least two video packet, figure 6A shows a interval of a GOP contains at least two video "packet" in the interleaving Pack Sequence).

However, Okada fail to teach each of the data packets comprises a transport stream packet having 188 bytes or a source packet having a header and the transport stream packet. Seo teach ach of the data packets comprises a transport stream packet having 188 bytes or a source packet having a header and the transport stream packet

Art Unit: 2621

(e.g. figure 4 of Seo shows each transport packet has a packet size or 188 bytes).

Column 16, lines 21-26 of Okada teach the packet size is 2K bytes, or 2048 bytes in the conventional DVD art, and Seo teach the packet size is 188 bytes. It would have been obvious to one ordinary skill in the art at the time the invention was made to replace the 2048 bytes data packet of Okada with the 188 bytes of Seo for the same purpose of video recording and playback. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art (KSR, 550 U.S. at ___, 82 USPQ2d at 1396).

Claims 11-14 are rejected for the same reasons as set forth in claim 8 above.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada and Seo as applied to claims 1, 8, 10, 11 and 12 above, and further in view of Yoo et al (US 2002/0,150,392 A1).

See the teaching of Okada and Seo above.

For claim 9, Okada et al and Seo fail to specify fixed packet interval is 10 packets. Yoo et al teach a fixed packet interval is 10 packets (paragraph [0033]). It would have been obvious for one ordinary skill in the art at the time the invention was made to have use 10 packets as a fixed interval in the system disclosed by Okada and Seo to simply the data process step and reduce the time for data processing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daquan Zhao/
Examiner, Art Unit 2621
Daquan Zhao

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621